

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :
Jaewan BYUN et al. : Confirmation No.: 6245
U.S. Patent Application No. 10/541,268 : Group Art Unit: 2617
Filed: April 13, 2006 : Examiner: SAYED T. ZEWARI

For: METHOD AND SYSTEM FOR RECOVERING FROM HAND-OFF FAIL FOR USE IN
CDMA 2000 1XEV-DO SYSTEM

SECOND PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria VA 22313-1450

Sir:

This paper is submitted in reply to the Office Action mailed December 1, 2009.

Applicants respectfully request review of the rejections of all claims as manifested in the Office Action. No amendments are being filed with this request.

This request is being filed with a *second* Notice of Appeal in compliance with 37 CFR 41.31. The appeal fee set forth in 37 CFR 41.20(b)(1) has been paid on September 23, 2008. The filing of these appeal papers is proper because the claims in the application has been twice rejected.¹

The review is requested for the reasons stated on the attached sheets.

¹ 35 U.S.C. 134(a): An applicant for a patent, any of whose claims has been twice rejected, may appeal from the decision of the primary examiner to the Board of Patent Appeals and Interferences, having once paid the fee for such appeal (emphasis added). 37 CFR 41.31(a)(1): Every applicant, any of whose claims has been twice rejected, may appeal from the decision of the examiner to the Board by filing a notice of appeal accompanied by the fee set forth in § 41.20(b)(1) within the time period provided under § 1.134 of this title for reply (emphasis added).

See, also MPEP, section 2104.1, quoting *Ex Parte Lemoine*, 46 USPQ2d 1420, 1423 (Bd. Pat. App. & Inter. 1994): So long as the applicant has twice been denied a patent, an appeal may be filed (emphasis added).

REASONS

The following clear errors are found in the Examiner's rejections.

1. As to claim 1, Applicants respectfully submit that the references singly or in combination do not teach or suggest the claimed "EV-DO access network controller... re-transmitting the traffic channel assignment signal to the hybrid access terminal if a response signal (L2ACK) is not transmitted thereto from the hybrid access terminal, thereby performing the hand-off..." In other words, the claimed system tries to recover from a hand-off failure upon receiving no response from the terminal.

The Examiner alleged that the claim feature is taught by *Turner* at paragraphs 0041-0043,² and/or *Hunzinger* at paragraphs 0040-0042, 0085-0087, 0028, 0023 and Abstract.³ Applicants respectfully disagree.

The cited portions of *Turner*, as will be apparent to the Panel upon reviewing the same, are directed to a WCD (wireless communication device) and do not teach or suggest any EV-DO access network controller. Even if an EV-DO access network controller was indeed inherent in the system of *Turner* as the Examiner alleged (which Applicants contend to the contrary), such "inherent" EV-DO access network controller is neither disclosed, taught nor suggested by *Turner* to be configured for performing at least the claimed "re-transmission." *Turner* is therefore irrelevant to the claim feature at issue.

The cited portions of *Hunzinger*, as will be apparent to the Panel upon reviewing the same, also fail to teach or suggest re-transmission of TCA (traffic channel assignment) if no response is received from the terminal.

Indeed, the Abstract of *Hunzinger* discloses that

...The multiple-access forward rescue channel is transmitted by one or more sectors in the network for use in soft handoffs as well as rescue. A failing MS may attempt to receive a message addressed to the failing MS on the multiple-access forward rescue channel...

² See Office Action at page 3, line 2 from bottom to page 4, line 3.

³ See Office Action at page 4, lines 8-10.

There is no teaching or suggestion of what would happen if the MS fails to respond.

Paragraph 0023 of *Hunzinger* discusses a dropped connection situation where the MS (mobile station) re-transmits a certain message if no ACK response is received from the BS (base station). The claim feature to the contrary requires the EV-DO access network controller, rather than the MS, to re-transmit the TCA if no response is received from the MS. This paragraph is irrelevant to the claim feature at issue.

Paragraph 0028 of *Hunzinger* discloses a reverse link based rescue which, like the forward link base rescue disclosed else where in the reference, is based on a rescue channel. There is no teaching or suggestion of what would happen if the MSs fail to respond or use the rescue channel.

Paragraph 0040 of *Hunzinger* discusses why it is necessary to avoid drop calls. This paragraph is irrelevant to the claim feature at issue.

Paragraph 0041 of *Hunzinger* discloses that a single common rescue channel is provided for all failing MSs. There is no teaching or suggestion of what would happen if the MSs fail to respond.

Paragraph 0042 of *Hunzinger* discloses that the failing MS *may* use the rescue channel to have its connection rescued. There is no teaching or suggestion of what would happen if the MSs fail to respond or use the rescue channel.

Paragraph 0085 of *Hunzinger* discloses the situation that occurs slightly before a dropped connection. Paragraph 0086 discloses that the MSs, upon detecting of fading signals that indicate a likelihood of a dropped connection, initiate/request rescue and then wait for the MS to respond. Paragraph 0087 discloses that the MS, upon receipt of rescue requests from the MSs and/or upon its detection of a potential dropped connection at the MSs, transmits RC-MA 222 (multi-access rescue channel transmission, FIG. 15). There is, however, no re-transmission of RC-MA 222 if the MSs fail to respond.

Thus, in *Hunzinger*, when the BS detects or is informed that a MS is failing, it transmits RC-MA (multi-access rescue channel transmission 222, FIG. 15). It is then up to the MS to try to

switch to the rescue channel. *Hunzinger* does not disclose what would happen if the MS fails to respond. No re-transmission of RC-MA 222 is found in or suggested by *Hunzinger*.

Accordingly, Applicants respectfully submit that the references as applied in the Office Action singly or in combination do not teach or suggest the claimed invention. The 35 U.S.C. 103(a) rejection of claim 1 is clearly erroneous and should be withdrawn.

2. Claims 2-12 depend on, or otherwise include limitations similar to, claim 1 and should be considered patentable over the art as currently applied.

3. As to claim 3, the Examiner improperly held that all claim features are found in *Turner*.⁴ Applicants respectfully disagree for at least two reasons.

First, the Examiner admitted, with respect to claim 1, that *Turner* does not explicitly disclose a system for recovering from a hand-off fail,⁵ and had to rely on *Hunzinger* for such a hand-off failure recovery system. All features of claim 3 are directed to a system for recovering from a hand-off fail. Thus, by the Examiner's own admission, *Turner* could not be cited as teaching all limitations of claim 3.

Second, contrary to the Examiner's allegation, *Turner* fails to teach or suggest the feature of claim 3, e.g., "if the EV-DO system receives the response signal (L2ACK) from the hybrid access terminal in response to the traffic channel assignment signal, the EV-DO system transmits an acknowledge signal for a reverse traffic channel to the hybrid access terminal, and then, re-transmitting the traffic channel assignment signal to the hybrid access terminal if a traffic channel completion signal is not transmitted to the EV-DO system from the hybrid access terminal, thereby performing the hand-off."

In other words, the claimed EV-DO system *re*-transmits the traffic channel assignment (TCA) signal *even though the terminal has acknowledged it before*.

The claim feature finds support in at least FIG. 4 where it is disclosed that the EV-DO system sends the TCA signal again (S470 ~ S440) even though the terminal has acknowledged

⁴ See Office Action at page 6, the first full paragraph.

(S442) it before. The claimed limitation can be found nowhere in both applied references, especially the cited portions of *Turner*.

The 35 *U.S.C. 103(a)* rejection of claim 3, and likewise, claim 10, is therefore clearly erroneous.

Withdrawal of the rejections of all claims in view of the above is believed appropriate and therefore respectfully requested.

To the extent necessary, a petition for an extension of time under 37 *C.F.R. 1.136* is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

LOWE HAUPTMAN HAM & BERNER, LLP

/Yoon S. Ham/

Yoon S. Ham

Registration No. 45307

USPTO Customer No. 22429
1700 Diagonal Road, Suite 310
Alexandria, VA 22314
(703) 684-1111
(703) 518-5499 Facsimile
Date: April 1, 2010
YSH/KL/jr

⁵ See Office Action at page 6, lines 6-7.